

## 2003 Weather Summary

As a whole, 2003 was a warm and dry year in Minnesota. The year started with a lack of snow. A wet spring and early summer followed for the southern two-thirds of the state. The second half of the year turned dry and the worst drought since 1988 was in full force at the close of the year.

January and February precipitation totals were below normal in most locations. Many communities were nearly devoid of snow cover until modest snowfalls covered the ground during the last week of January. February marked the fourth consecutive month of very light precipitation in the state. Only in parts of the southwest and central Minnesota did precipitation totals top normal. February was cold with temperatures finishing two to seven degrees below normal.

March and April fell short of normal precipitation in many communities. April was wet in the central one third of the state. A small corner in the southwestern area received abundant rain. Pipestone, for instance, received 7 inches of rain for the month. In the central region and far southwest, April precipitation totals exceeded the historical average by more than one inch.

Precipitation totals in May were generally at or above normal across most of the state. The exception was the north central with slightly below normal rainfall. The heaviest rainfall was in the east central area with some sites exceeding six inches for the month.

Rainfall in June varied widely across the state. Monthly precipitation totals topped historical averages by one to six inches over portions of northwestern, west central, central, and east central Minnesota. Elsewhere across the state, rainfall was near to somewhat below normal. June was the last month of the year that received above normal rainfall statewide.

In mid-July a dry spell began. For the rest of the summer, rainfall was below normal in most communities. Very isolated heavy rains led to above normal July precipitation totals for a handful of communities, mainly in northern Minnesota. August rainfall totals across most of the state ranked among the lowest on recent record. August rainfall totals were generally one and one half inches below normal, with many communities reporting less than one inch of precipitation for the month. Precipitation totals in August fell short of the historical average by one and one half to three and one half inches. August temperatures were above normal by two to five degrees.

Some relief to the dry spell came with September rainfall in southwestern, northwestern, and northeastern counties. Rainfall there exceeded normal by one to two inches. September precipitation was near normal across the central one third of the state. September rainfall in north central, south central, and southeastern communities fell short of normal by about one inch.

The dry spell, now considered a moderate drought, intensified in October and November with precipitation totals falling short of normal in most counties. Monthly mean temperatures for October were one to four degrees above normal.

Precipitation totals in December fell short of normal by one quarter to one half of an inch in approximately two thirds of the counties. Temperatures for December were warmer than normal. In most communities, monthly average temperatures exceeded the norm by six to ten degrees. 2003 ended with the drought continuing and intensifying statewide.

The accompanying maps show that virtually the entire state finished below normal for the year. This was the first time since 1989 that the state finished below the 25<sup>th</sup> percentile for annual precipitation.

Source: State Climatology Office, DNR – Division of Waters

